AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A positioning system for determining a position of a positioning terminal, the system including a plurality of first signal sources each emitting a respective first signal, and one or more second signal sources each emitting a respective second signal, the first signals being synchronous with a reference time and the second signals being non-synchronous with the first signals, for, based on a signal propagation time and signal propagation speed of the first signals, determining a distance from the positioning terminal, said positioning system comprising:

a measurement device for receiving the first signals from the first signal sources to determine a position P of the measurement device and a time of measurement when the measurement device receives the first signals and for, based on the time of measurement, measuring a receiving time (TR), based on the reference time, of a predetermined event of the second signals;

a control device for determining a signal propagation time (t) between the measurement device and one of the second signal sources by calculating a relative distance |P-Q| between the measurement device and the one second signal source based on the position P measured by the measurement device and a position Q of the one second signal source and by dividing the resulting distance by the signal

propagation speed, and determining a time (TT), based on the reference time, at which the one second signal source originates the predetermined event by solving TR-t;

the positioning terminal having a receiving device for receiving the signals from the first and second signal sources; and

a communication device for communicating between the control device and the positioning terminal,

wherein the positioning terminal uses the time TT as a reference to receive the signals from the first signal sources for positioning.

2. (currently amended) A positioning system for determining a position of a positioning terminal, the system including a plurality of first signal sources each emitting a respective first signal, and one or more second signal sources each emitting a respective second signal, the first signals being synchronous with a reference time and the second signals being non-synchronous with the first signals, for, based on a signal propagation time and signal propagation speed of at least one of the first and second signal sources so as to determine a position of the positioning terminal, said positioning system comprising:

a measurement device associated with each second signal source for receiving the first signals from the first signal sources to determine a position P of the measurement device and a time of measurement when the measurement device receives the first signals and for, based on the time of measurement, measuring a receiving time (TR), based on the reference time, of a predetermining event of the second signals;

a control device for determining a signal propagation time (t) between the measurement device and its associated second signal source by calculating a relative distance |P-Q| between the measurement device and its associated second signal source based on the position P measured by the measurement device and a position Q of the second signal source and by dividing the resulting distance by the signal propagation speed, and for determining a time (TT), based on the reference time, at which the second signal source originates the predetermined event by solving TR-t;

the positioning terminal having a receiving device for receiving the signals from the first and second signal sources; and

a communication device for communicating between the control device and the positioning terminal,

wherein the positioning terminal receives the first and second signals for positioning.

3. (original) The positioning system according to claim 1, wherein the first signal sources further comprise GPS satellites.

4. (original) The positioning system according to claim 1, wherein the second signal sources further comprise base stations of a mobile communication network.

5. (original) The positioning system according to claim 1, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time

information and measures P and TR to voluntarily report the measured P and TR to the control device in the same mobile communication network.

6. (original) The positioning system according to claim 1, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time information, and measures P and TR according to a request from the control device in the same mobile communication network to report the measured P and TR to the control device.

7. (original) A positioning system according to claim 1, wherein the second signal sources further comprise television broadcast stations.

8. (original) The positioning system according to claim 2, wherein the first signal sources further comprise GPS satellites.

9. (original) The positioning system according to claim 2, wherein the second signal sources further comprise base stations of a mobile communication network.

10. (original) The positioning system according to claim 2, wherein the measurement device further comprises a mobile terminal in good conditions, wherein the position P of the measurement device can be determined without accurate time

information, and measures P and TR to voluntarily report the measured P and TR to the control device in the same mobile communication network.

11. (original) The positioning system according to claim 2, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time information, and measures P and TR according to a request from the control device in the same network to report the measured P and TR to the control device.

12. (previously presented) The positioning system according to claim 1, wherein the second signal sources further comprise television broadcast stations.

13. (currently amended) A positioning terminal for determining a position of the positioning terminal, the positioning terminal including a receiving device for receiving signals from a plurality of first signal sources each emitting a respective first signal and one or more second signal sources each emitting a respective second signal, the first signals being synchronous with a reference time and the second signals being non-synchronous with the first signals, for, based on a signal propagation time and signal propagation speed of the first signals, determining a distance from the positioning terminal, said positioning terminal comprising:

a calculation device for calculating ~~the positioning terminal calculate~~ TT=TR-|P-Q|/c;

wherein the P is a position of a measurement device when the measurement device received the first signals from the first signal sources;

the Q is a position of the one second signal source;

the |P-Q| is a relative distance between the measurement device and the one second source;

the c is a signal propagation speed;

the TR is a receiving time, based on the reference time, when the measurement device received a predetermined event of the second signals at the position P;

wherein the positioning terminal uses the time TT as a reference to receive the signals from the first signal sources for positioning.

14. (currently amended) A positioning terminal for determining a position of the positioning terminal, the positioning terminal including a receiving device for receiving signals from a plurality of first signal sources each emitting a respective first signal and one or more second signal sources each emitting a respective second signal, the first signals being synchronous with a reference time and the second signals being non-synchronous with the first signals, for, based on a signal propagation time and signal propagation speed of at least one of the first and second sources so as to determine a position of the positioning terminal, said positioning terminal comprising:

a calculation device for calculating ~~the positioning terminal calculate~~ TT=TR-|P-Q|/c;

wherein the P is a position of a measurement device when the measurement device received the first signals from the first signal sources;

the Q is a position of the one second signal source;

the |P-Q| is a relative distance between the measurement device and the one second source;

the c is a signal propagation speed;

the TR is a receiving time, based on the reference time, when the measurement device received a predetermined event of the second signals at the position P;

wherein the positioning terminal uses the time TT as a reference to receive the signals from the first signal sources for positioning;

wherein the positioning terminal receives the first and second signals for positioning.

15. (previously presented) The positioning terminal according to claim 13, wherein the first signal sources further comprise GPS satellites.

16. (previously presented) The positioning terminal according to claim 13, wherein the second signal sources further comprise base stations of a mobile communication network.

17. (previously presented) The positioning terminal according to claim 13, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time information and measures P and TR to voluntarily report the measured P and TR to the control device in the same mobile communication network.

18. (previously presented) The positioning terminal according to claim 13, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time information, and measures P and TR according to a request from the control device in the same mobile communication network to report the measured P and TR to the control device.

19. (previously presented) The positioning terminal according to claim 13, wherein the second signal sources further comprise television broadcast stations.

20. (previously presented) The positioning terminal according to claim 14, wherein the first signal sources further comprise GPS satellites.

21. (previously presented) The positioning terminal according to claim 14, wherein the second signal sources further comprise base stations of a mobile communication network.

22. (previously presented) The positioning terminal according to claim 14, wherein the measurement device further comprises a mobile terminal in good conditions, wherein the position P of the measurement device can be determined without accurate time information, and measures P and TR to voluntarily report the measured P and TR to the control device in the same mobile communication network.

23. (previously presented) The positioning terminal according to claim 14, wherein the measurement device further comprises a mobile terminal in good conditions, where the position P of the measurement device can be determined without accurate time information, and measures P and TR according to a request from the control device in the same network to report the measured P and TR to the control device.

24. (previously presented) The positioning terminal according to claim 13, wherein the second signal sources further comprise television broadcast stations.